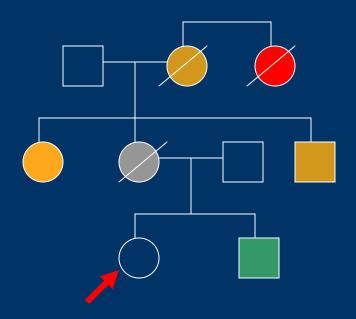
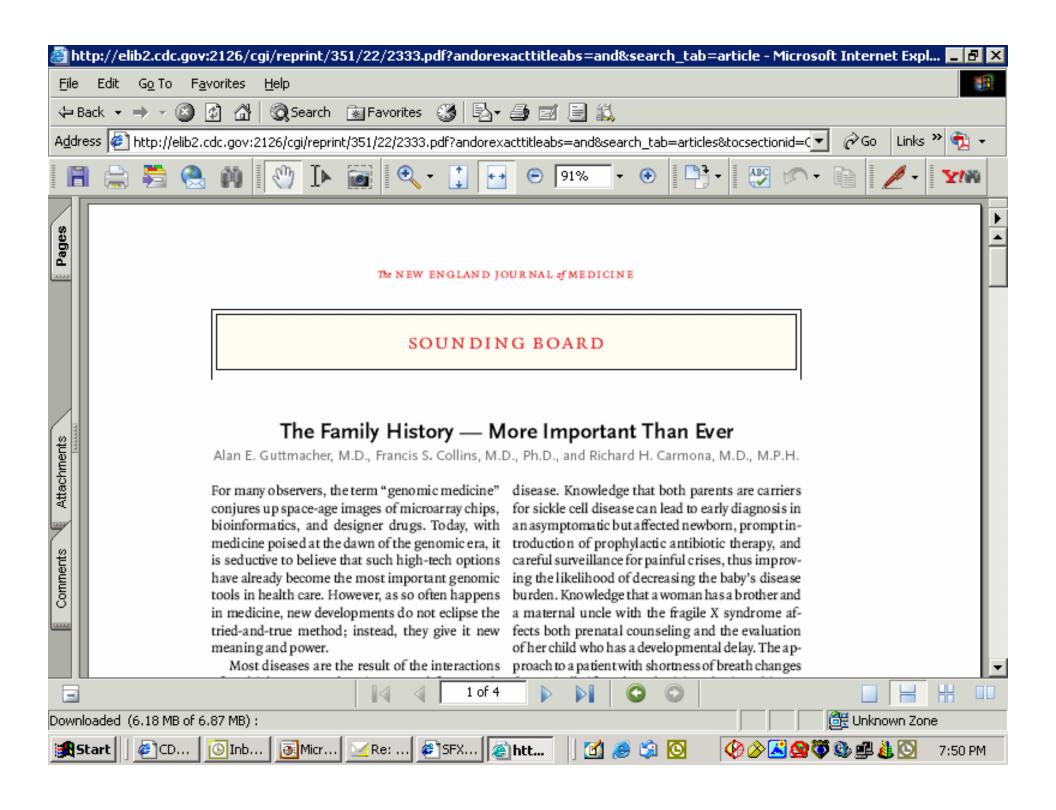
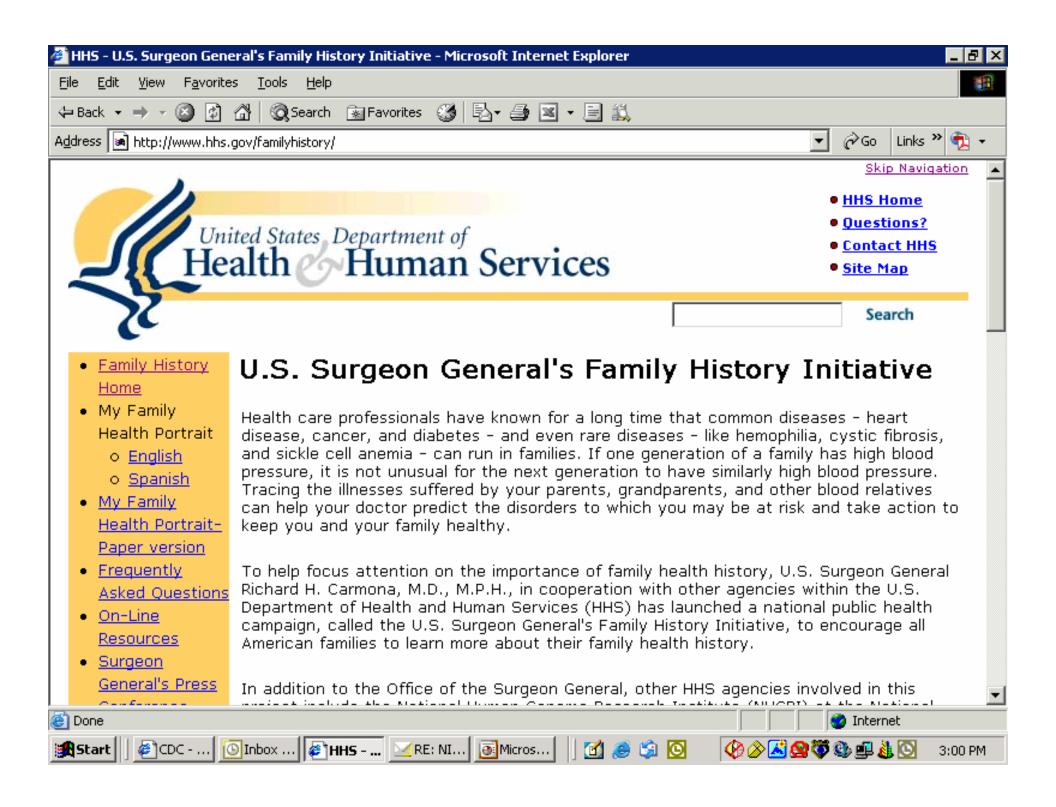
Family History: a Tool for Public Health and Disease Prevention

Muin J. Khoury MD, PhD CDC Office of Genomics & Disease Prevention









CDC Family History Public Health Initiative

Evaluate the use of family history for assessing risk of common diseases and influencing early detection and prevention strategies

Components

- Assessment of existing strategies & research gaps
- Development of new tools and methods
- Research and evaluation
- Public awareness and provider education



Family history is an important risk factor for almost all common diseases



Relative Risk

Heart disease

Breast cancer

Colorectal cancer

Prostate cancer

Melanoma

Diabetes

Osteoporosis

Asthma

2.0 - 5.4

2.1 - 3.9

1.7 - 4.9

3.2 - 11.0

2.7 - 4.3

2.4 - 4.0

2.0 - 2.4

3.0 - 7.0

Am J Prev Med February 2003



Family history is a risk factor for diseases throughout all stages of life

birth defects blood disorders



infants

diabetes depression



adolescents

Alzheimer's disease osteoporosis



older adults



children

asthma autism

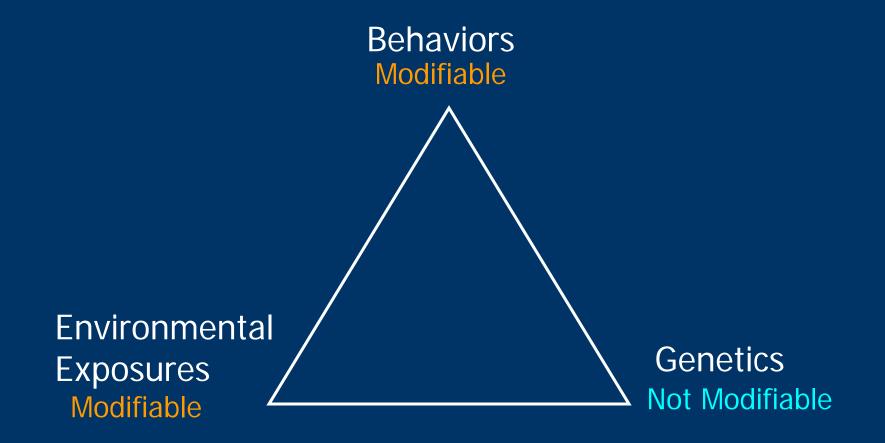


adults

cancer heart disease

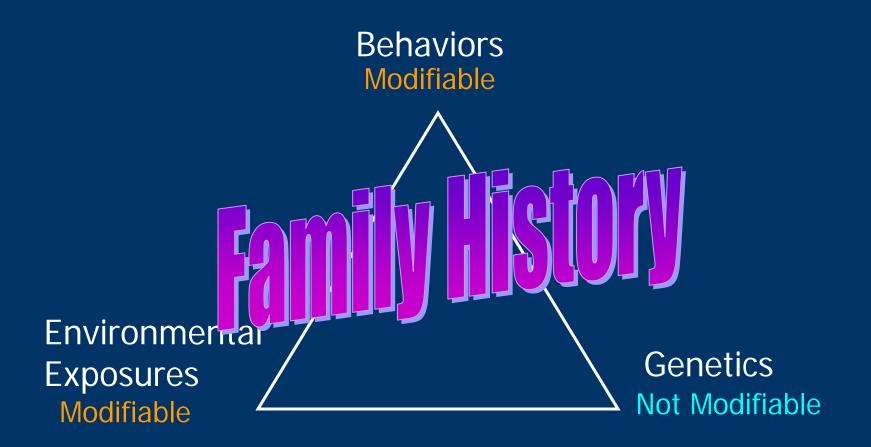


Risk factors for common diseases



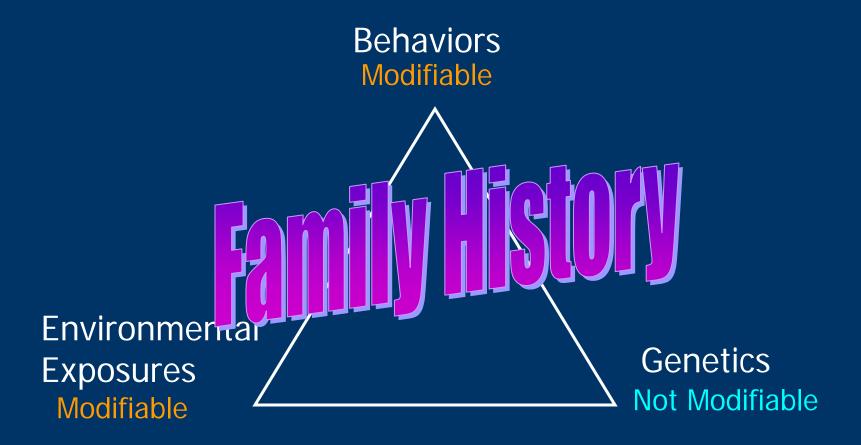


Risk factors for common diseases

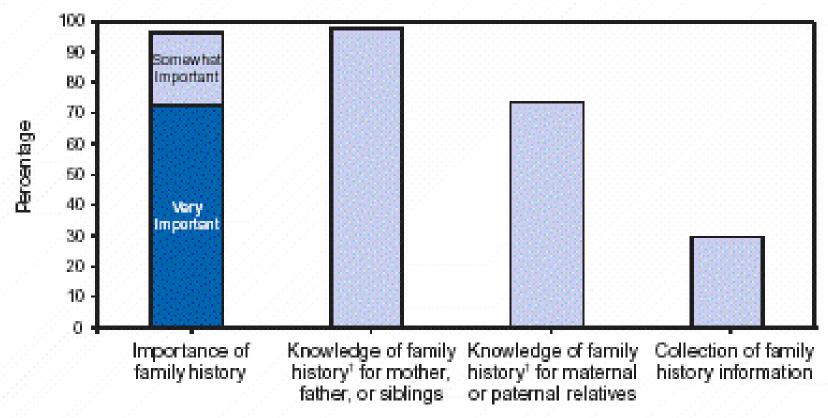




Risk factors for common diseases



Family History is More than Just An Index For Single Gene Disorders FIGURE. Percentage of respondents* reporting importance of family history to their personal health, knowledge of family history of type 2 diabetes, and collection of family history information — HealthStyles Survey, United States, 2004



* N = 4,345. † Family history of type 2 diabetes.

Family History Collection by PCPs

- Family history collected at about 50% of new visits and 22% of established visits
- Average duration of visit, 10 minutes; average duration of family history discussion, 2.5 minutes
 Acheson et al., 2000
- Only 29% of PCPs feel prepared to take family history and draw pedigrees
 Suchard et al., 1999

Family history Risk Stratification Concept

Assessment Risk stratification Intervention **Standard prevention Average** recommendations **Family Personalized prevention Moderate History** recommendations Tool personalized prevention High recommendations & referral for genetic evaluation

CDC Family History Public Health Initiative



How can we use family history?

- assess risk for common diseases
- influence early screening for disease
- educate people about prevention measures
- Ascertain persons and families with "genetic diseases" for early intervention







H My Family Profile

☐ My Report

Introduction

Family Tree

Assessment Summary

Coronary Heart Disease

Stroke

Diabetes

Colon Cancer

Breast Cancer

Ovarian Cancer

Screening Tests

Lifestyle Changes

Print My Report

Disease Resources

Lifestyle Resources

Family History Resources

My Report - Assessment Summary

Disease:	Family history's impact on risk:
Coronary Heart Disease	WEAK
Stroke	WEAK
Diabetes	STRONG
Colon Cancer	WEAK
Breast Cancer	MODERATE
Ovarian Cancer	WEAK

Learn more about family history as a risk factor for disease.

You should print your full report and discuss it with your health care professional. However, you can also view the entire report online by selecting Continue.

Print My Report

Previous Screen

Continue

Resource Guide:



Evaluating Family History Tools for Health Promotion and Disease Prevention

October 2005



Breast Cancer Colorectal Cancer Coronary Heart Disease Diabetes Ovarian Cancer Stroke







Use of Family History Can Help Achieve Population Health Goals

- 14% of families account for almost half of the burden of heart attacks in Utah (Hunt 2003)
- Almost half the population has a family history of a close relative with one or more common chronic diseases (Scheuner, 1997)
- More than 70% of adults with diabetes have a family history of diabetes (Hariri et al, 2005)
- Targeting colorectal cancer screening to persons with close family history can double prevented cases in the population (Tyagi and Morris, 2003)

Public Health Utility of Family History

• "Family History effectively bridges clinical medicine with public health by focusing risk assessment at a level between the extremes of "one at a time" and "one size fits all"

– Hunt S, et al. Am J Prev Med 2003;24:136.

